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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,703	01/15/2004	Francois Lacoste	91301	4489

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CHICAGO, IL 60606

EXAMINER

KHOLDEBARIN, IMAN K

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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10/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/757,703

Applicant(s)

LACOSTE ET AL.

Examiner

I Kenneth Kholdebarin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-3 and 8 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

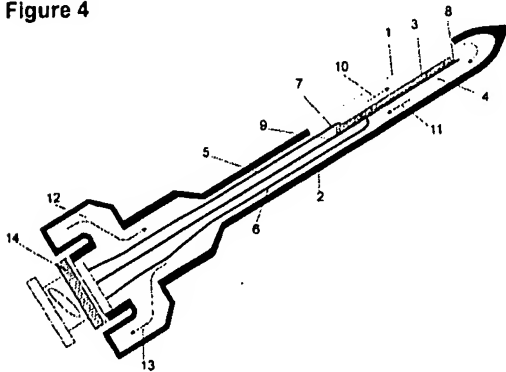
3. Claims 1, 8, 15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chopra (US 6589174 B1).

Chopra discloses in its broad aspect the interstitial ultrasound applicator of the present invention is comprised of a transducer, preferably planar, with multiple acoustic matching layers enabling operation at a range of frequencies for optimal "control" of the depth of thermal coagulation. The transducer shape can be oval, planar, semi-circular, octagonal, hexagonal or any polygon or shape. According to one embodiment, the device is seated in a housing, preferably a tubular

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housing. Since, in a preferred embodiment, a planar transducer is employed, the ultrasound field according to this embodiment is highly collimated, and the delivery of energy is highly localized. This allows for the coagulation of very small volumes of tissue. high power is preferably delivered to the ultrasound transducer, and according to one embodiment, water cooling is employed in order to remove any thermal losses.

Figure 4



4. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Okada (US 20050004589 A1).

Okada teaches the ultrasound coagulation apparatus with transducer with the blade moveable with respect to the transducer. Okada discloses moreover, the clamping member unit 622 has, as shown in FIG. 79A, a metallic movable blade (clamping member) 641 and an operation rod 634 (clamping member driving means). The movable blade 642 is opposed to the stationary blade 629, and serves as a jaw that clamps a living tissue in cooperation with the stationary blade 629

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or frees the living tissue. The operation rod 634 serves as an operation force-transmitting member for driving the movable blade 641 to open or close it.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chopra in view of Pederson (US 4,206,763). The teachings of Oakley have been discussed above.

Re Claim 4, 6, 9 and 11: However, Chopra fails to disclose or fairly suggest having a channel that opens in the region of transducer, adapted to transmit a partial vacuum.

Pederson teaches the method of using partial vacuum in the region of ultrasound transducer in medical imaging, (See col.6; lines 5-10).

Therefore, in view of Pederson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Chopra probe with containment chamber comprising a channel with partial vacuum in order to reduce the movement of the tissue during the examination and transducing ultrasonic signals.

7. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of Chopra. The teachings of Okada have been discussed above.

Re Claim 14: However, Okada fails to disclose or fairly suggest the coagulation apparatus having an imaging transducer.

Chopra teaches to have the ultrasonic imaging transducer integrally part of the coagulation apparatus.

Therefore, in view of Chopra it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace Okada ultrasound transducer with an imaging ultrasound transducer in order to allowing the device to be easily aimed towards the internal bleeding site.

8. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada in view of Lafon (US 6,379,320)

The teachings of Okada have been discussed above.

Lafon discloses the endoscope apparatus wherein the coagulation instrument has a diameter less than 1 to 5 mm, (See col. 7; line 2-5) Lafon discloses the endoscopic apparatus is flexible (See col.7 line 59-65). Lafon disclose the endoscopic apparatus wherein the transducer (8) is in the region of a free end of the apparatus (Lafon called that section portion 4), (See fig.4; col. 8; line 51-54).

Therefore it would have been obvious to one ordinary skill in the art the time of the invention was made to have the endoscope apparatus with the coagulation instrument flexible and in certain diameter in order to access limited region of biological tissues.

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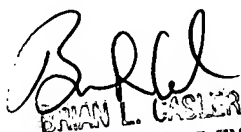
CONCLUSION

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to I Kenneth Kholdebarin whose telephone number is 571-270-1347. The examiner can normally be reached on M-F 8 AM- 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IKK
/Iman Kenneth Kholdebarin/
09/29/2007


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNICAL STAFF